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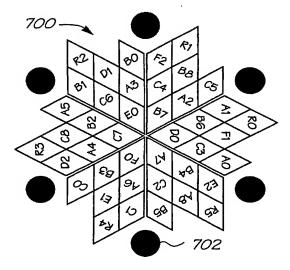(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: ORIENTATION-INDICATING CYCLIC POSITION CODES

(57) Abstract: Machine-readable coded data disposed on or in a substrate in accordance with a layout, the layout having at least order n rotational symmetry, where n is at least two, the layout encoding an orientation codeword comprising a sequence of an integer multiple m of of n symbols, where m is one or more, each encoded symbol being distributed at n locations about a center of rotational symmetry of the layout such that decoding the symbols at each of the n orientations of the layout produces n representations of the orientation codeword, each representation comprising a different cyclic shift of the orientation codeword and being indicative of the degree of rotation of the layout, and wherein the orientation codeword is fault tolerant.